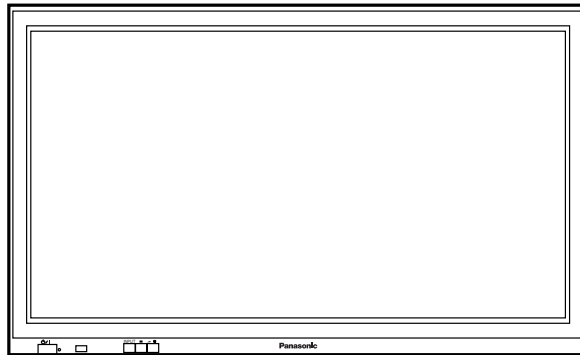# Panasonic

TC-42PD1FA

Wide Plasma Display

Operating
Instructions

Dear Panasonic Customer

Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new Wide Plasma Display.
To obtain maximum benefit from your set, please read these Instructions before making any adjustments, and retain them for future reference. Retain your purchase receipt also, and note down the Model Number and Serial Number of your set in the space provided on the rear cover of these Instructions.

Table of Contents

Note:
(1) If still pictures from sources such as video games or computers are projected for long periods, the image may become burned into the Wide Plasma Display panel (producing an "afterimage").

IMPORTANT SAFETY NOTICE

WARNING: To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or moisture.

WARNING:
1) To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
2) Do not remove the earthing pin on the power plug. This apparatus is equipped with a three pin earthing-type power plug. This plug will only fit an earthing-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician.
   Do not defeat the purpose of the earthing plug.

WARNING
This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CAUTION
To assure continued compliance, the shielded video cable with bonded ferrite sleeves must be used when connecting this Wide Plasma Display to video and computer equipment.
(Refer to page 8, 12, 14 and 15)

CAUTION
This appliance is intended for use in environments which are relatively free of electromagnetic fields.
Using this appliance near sources of strong electromagnetic fields or where electrical noise may overlap with the input signals could cause the picture and sound to wobble or cause interference such as noise to appear.
To avoid the possibility of harm to this appliance, keep it away from sources of strong electromagnetic fields.

Safety Precautions

WARNING

Set-up

This Wide Plasma Display is for use only with the following optional accessories. Use with any other type of optional accessories may cause instability which could result in the possibility of injury.

- Manufactured by Panasonic   Pedestal   TY-ST42PT1E
- Manufactured by Panasonic   Wall stand   TY-ST42PW1E
- Manufactured by Panasonic   Mobile stand   TY-ST42PF1E
- Manufactured by Panasonic   Wall-hanging bracket (vertical)   TY-WK42PV1E
- Manufactured by Panasonic   Wall-hanging bracket (angled)   TY-WK42PR1E
- Manufactured by Panasonic   Ceiling unit   TY-CE42PS1E

Always be sure to ask a qualified technician to carry out set-up.

Do not place the Wide Plasma Display on sloped or unstable surfaces.

- The Wide Plasma Display may fall off or tip over.

Do not place any objects on top of the Wide Plasma Display.

- If water spills onto the Wide Plasma Display or foreign objects get inside it, a short-circuit may occur which could result in fire or electric shock. If any foreign objects get inside the Wide Plasma Display, please consult your local Panasonic dealer.

If using the pedestal (optional accessory), leave a space of 10 cm or more at the top, left and right, 6 cm or more at the bottom, and 7 cm or more at the rear. If using some other set-up method, leave a space of 10 cm or more at the top, bottom, left and right, and 1.9 cm or more at the rear.

When using the Wide Plasma Display

The Wide Plasma Display is designed to operate on 220-240 V AC, 50/60 Hz.

Do not cover the ventilation holes.

- Doing so may cause the Wide Plasma Display to overheat, which can cause fire or damage to the Wide Plasma Display.

Do not stick any foreign objects into the Wide Plasma Display.

- Do not insert any metal or flammable objects into the ventilation holes or drop them onto the Wide Plasma Display, as doing so can cause fire or electric shock.

Do not remove the cover or modify it in any way.

- High voltages which can cause severe electric shocks are present inside the Wide Plasma Display. For any inspection, adjustment and repair work, please contact your local Panasonic dealer.

Securely insert the power cord plug as far as it will go.

- If the plug is not fully inserted, heat may be generated which could cause fire. If the plug is damaged or the wall socket plate is loose, they should not be used.

Do not handle the power cord plug with wet hands.

- Doing so may cause electric shocks.

Do not do anything that might damage the power cable. When disconnecting the power cable, hold the plug, not the cable.

- Do not damage the cable, make any modifications to it, place heavy objects on top of it, heat it, place it near any hot objects, twist it, bend it excessively or pull it. To do so may cause fire and electric shock. If the power cable is damaged, have it repaired at your local Panasonic dealer.

If not using the Wide Plasma Display for a prolonged period of time, pull the power cord plug out from the wall outlet.

Safety Precautions

If problems occur during use

If a problem occurs (such as no picture or no sound), or if smoke or an abnormal odour starts to come out from the Wide Plasma Display, immediately pull the power cord plug out from the wall outlet.
- If you continue to use the Wide Plasma Display in this condition, fire or electric shock could result. After checking that the smoke has stopped, contact your local Panasonic dealer so that the necessary repairs can be made. Repairing the Wide Plasma Display yourself is extremely dangerous, and should never be done.

If water or foreign objects get inside the Wide Plasma Display, if the Wide Plasma Display is dropped, or if the cabinet becomes damaged, disconnect the power cord plug immediately.
- A short may occur, which could cause fire. Contact your local Panasonic dealer for any repairs that need to be made.

CAUTION
When using the Wide Plasma Display

Do not bring your hands, face or objects close to the ventilation holes of the Wide Plasma Display.
- Heated air comes out from ventilation holes and the top of Wide Plasma Display will be hot. Do not bring your hands or face, or objects which cannot withstand heat, close to this port, otherwise burns or deformation could result.

Be sure to disconnect all cables before moving the Wide Plasma Display.
- If the Wide Plasma Display is moved while some of the cables are still connected, the cables may become damaged, and fire or electrical shock could result.

Cleaning and maintenance

The front of the display panel has been specially treated. Wipe the panel surface gently using only the accessory cleaning cloth or a soft, lint-free cloth.
- If the surface is particularly dirty, wipe with a soft, lint-free cloth which has been soaked in pure water or water to which a small amount of neutral detergent has been added, and then wipe it evenly with a dry cloth of the same type until the surface is dry.
- Do not scratch or hit the surface of the panel with fingernails or other hard objects, otherwise the surface may become damaged. Furthermore, avoid contact with volatile substances such as insect sprays, solvents and thinners, otherwise the quality of the surface may be adversely affected.

If the cabinet becomes dirty, wipe it with a soft, dry cloth.
- If the cabinet is particularly dirty, soak the cloth in water to which a small amount of neutral detergent has been added and then wring the cloth dry. Use this cloth to wipe the cabinet, and then wipe it dry with a dry cloth.
- Do not allow any detergent to come into direct contact with the surface of the Wide Plasma Display. If water droplets get inside the unit, operating problems may result.
- Avoid contact with volatile substances such as insect sprays, solvents and thinners, otherwise the quality of the cabinet surface may be adversely affected or the coating may peel off. Furthermore, do not leave it for long periods in contact with articles made from rubber or PVC.

Disconnect the power plug from the wall outlet as a safety precaution before carrying out any cleaning.
- Electric shocks can result if this is not done.

Clean the power cable regularly to prevent it becoming dusty.
- If dust builds up on the power cord plug, the resultant humidity can damage the insulation, which could result in fire. Pull the power cord out from the wall outlet and wipe it with a dry cloth.
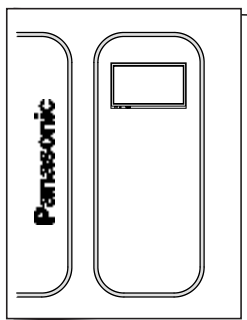
Accessories

Accessories Supplied

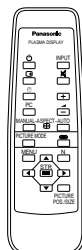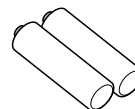**Check that you have the accessories and items shown**

Operating Instruction book

Remote Control Transmitter
TNQE178

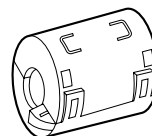Batteries for the Remote Control
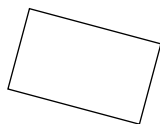Transmitter
(2 × R6 (UM3) Size)

RCA-BNC adaptor plug
TJS1A4270

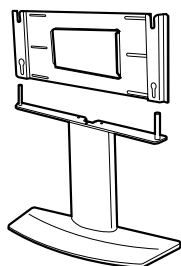Cleaning Cloth
TPEX006

Ferrite sleeve
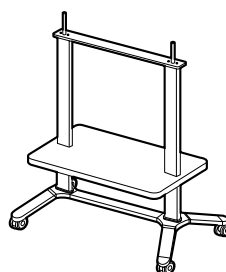TSK1027

Guarantee Card

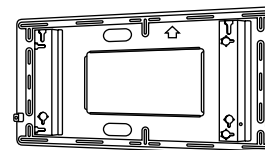## Optional Accessories

● Pedestal
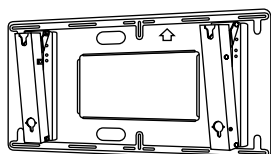 TY-ST42PT1E

● Wall stand
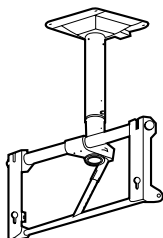 TY-ST42PW1E

● Mobile stand
  TY-ST42PF1E

● Wall-hanging bracket
  (vertical)
  TY-WK42PV1E

● Wall-hanging bracket
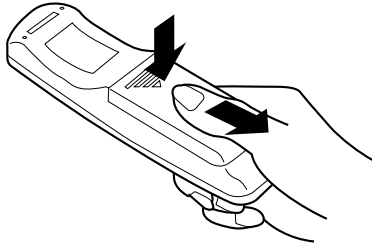 (angled)
  TY-WK42PR1E

● Ceiling unit
  TY-CE42PS1E

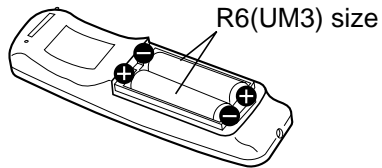● RS-232C Conversion cable
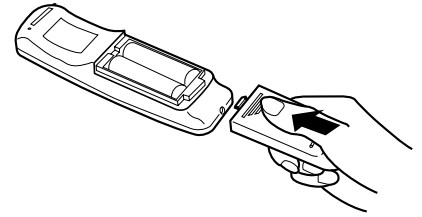 TY-SCP02RS1E

Remote Control Batteries

1

Press and slide off the battery cover

2

R6(UM3) size

Insert batteries – note correct polarity
(+ and –)

3

Replace the cover

Note:
(1) Make sure that the batteries are fitted the correct way round.
(2) Do not mix old batteries with new batteries. Remove old, exhausted batteries immediately.
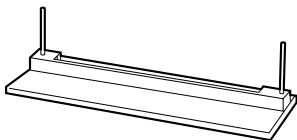(3) Do not mix different battery types, i.e. Alkaline and Manganese. Do not use rechargeable (Ni-Cad) batteries.

Quick Start Guide

Set-up

Be sure to use the special installation brackets (refer to page 6) when setting up the Wide Plasma Display.
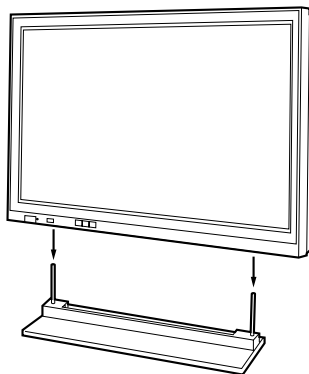Always be sure to ask a qualified technician to carry out set-up.

(Example) When using the pedestal to set up the Wide Plasma Display
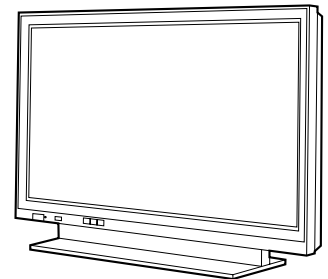
1

Assemble the pedestal by attaching the poles.

2

Insert the poles of the pedestal into the holes in the bottom of the Wide Plasma Display.

3

Secure the Wide Plasma Display at the back using the four screws.

Note:
(1) Refer to the Installation Instructions supplied with the pedestal for details on assembling the pedestal.

Connections

Connecting the speakers.
Refer to the Installation Manual for the speakers for details on speaker installation.
Fit the speakers and connect the speakers.

Rear

SPEAKERS(8Ω)

(2)

(1)

speakers
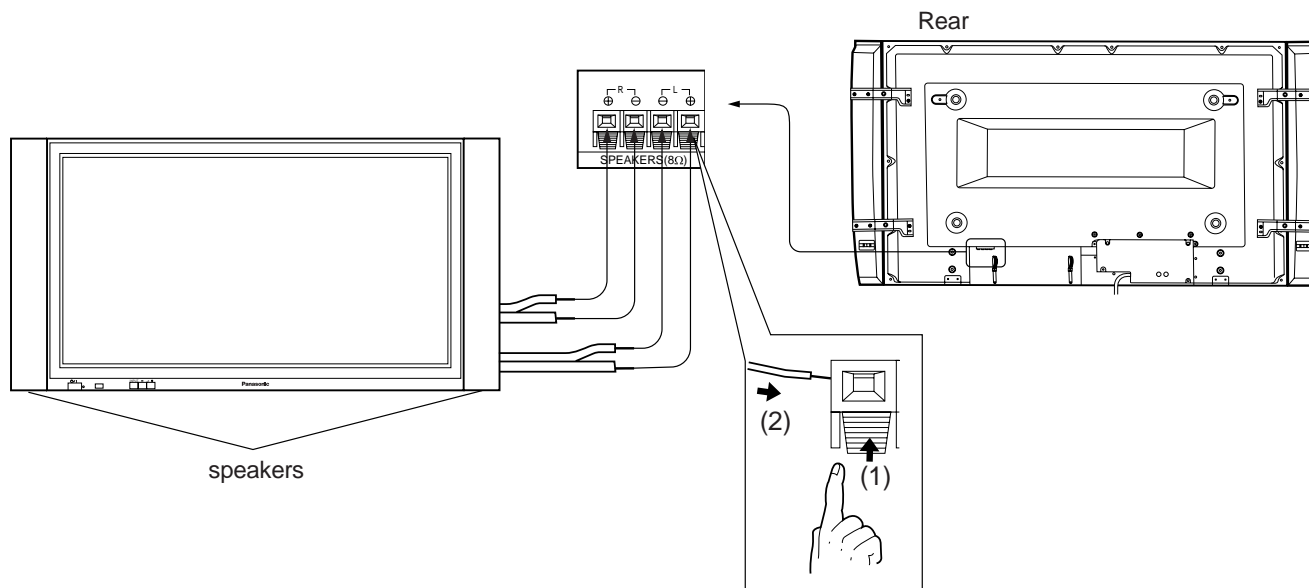
Connecting equipment such as a VCR.
Connecting other types of equipment see pages 12 to 16.

(Example) When connecting an S-VIDEO VCR.

Rear

(S-VIDEO VCR)

Audio OUT   Video   S-Video
R   L   OUT   OUT

OUT
AUTO
75Ω/HI-Z   VIDEO
IN

L
AUDIO
S–VIDEO

AV

less than
20 cm

Video input to
S-VIDEO socket

Ferrite sleeve
(Supplied)

AUDIO   VIDEO

2×RCA Audio cables

Audio input to
L/R sockets
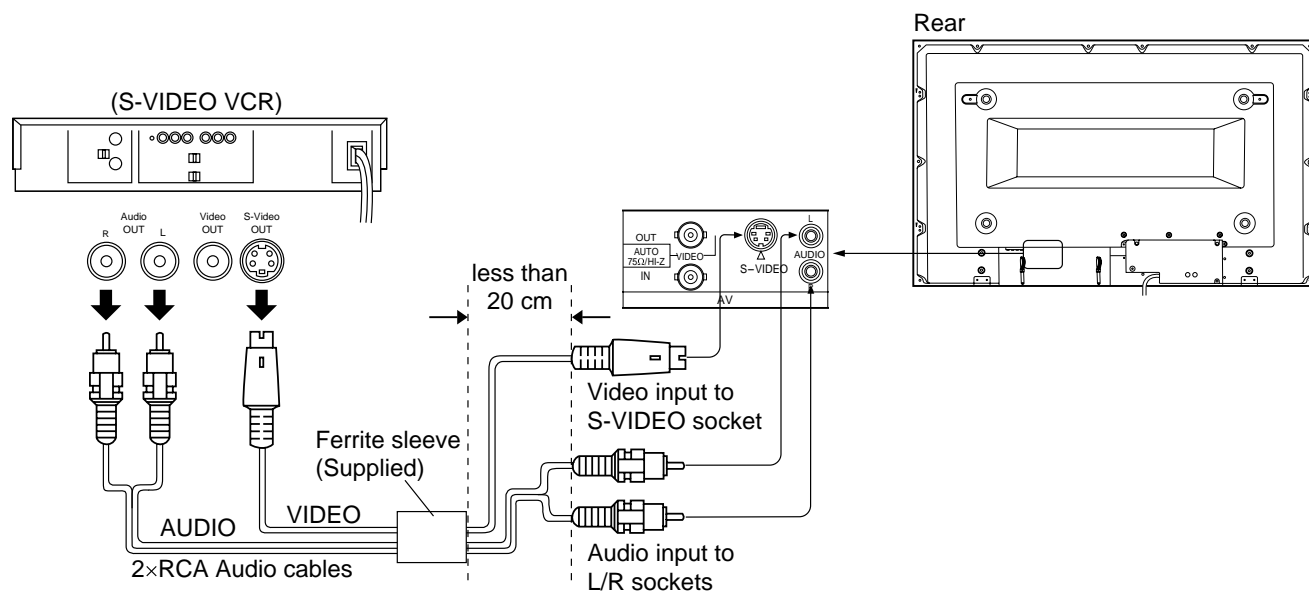
Plug in and switch on

Power Switch
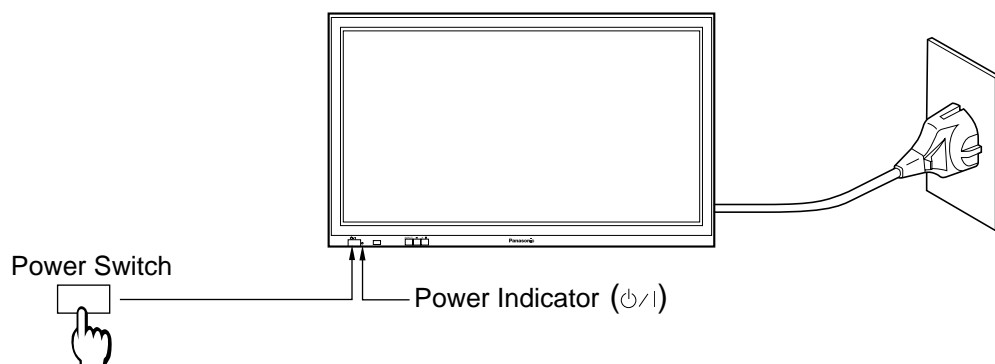
Power Indicator (⏻/I)

The Power Indicator will light.
Power-OFF.......... Indicator not illuminated
Stand-by ⏻ .... Red
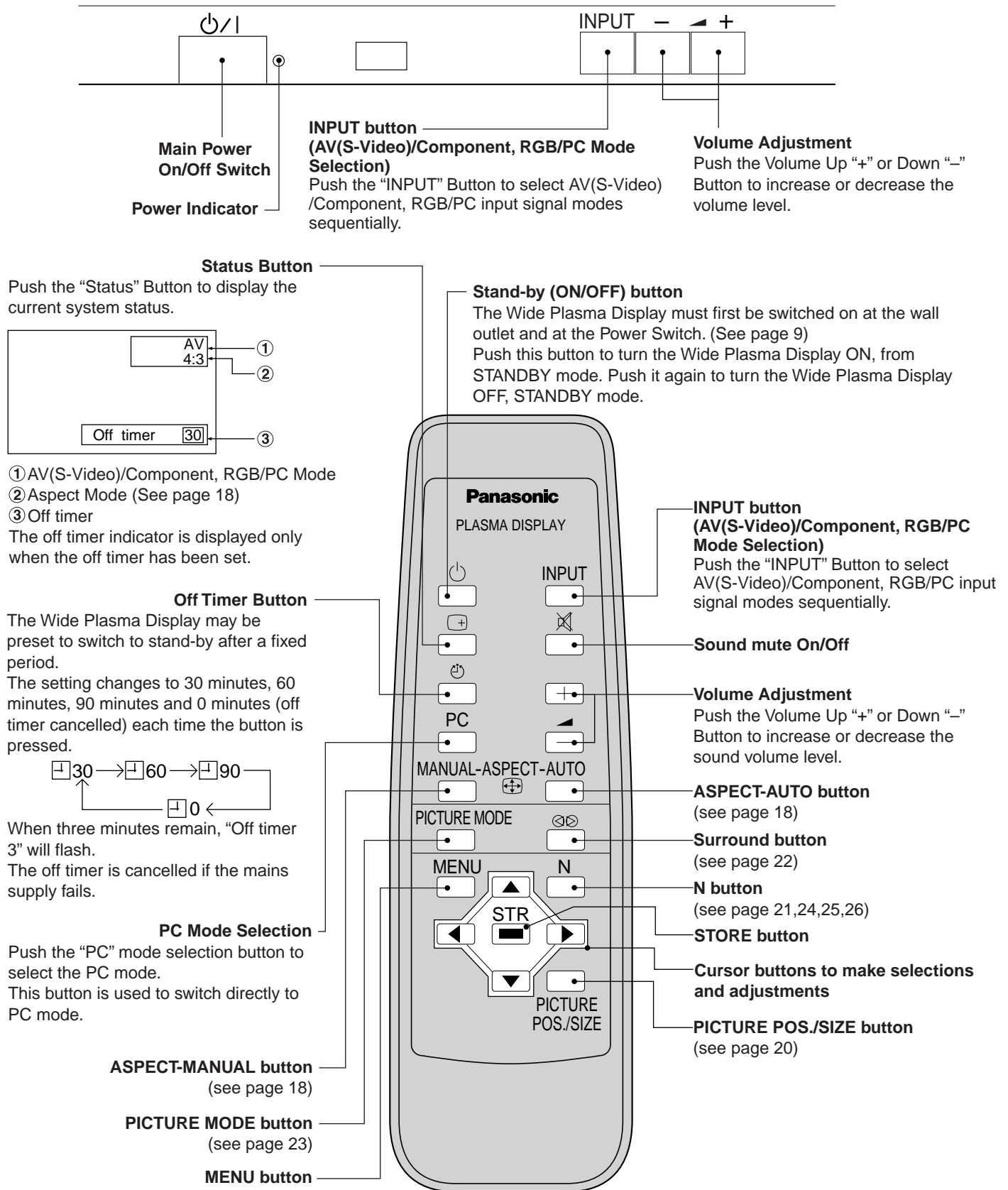Power-ON .... Green

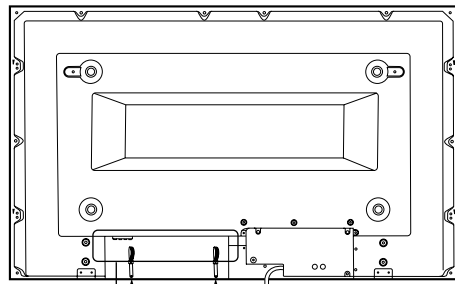## Select the input signal
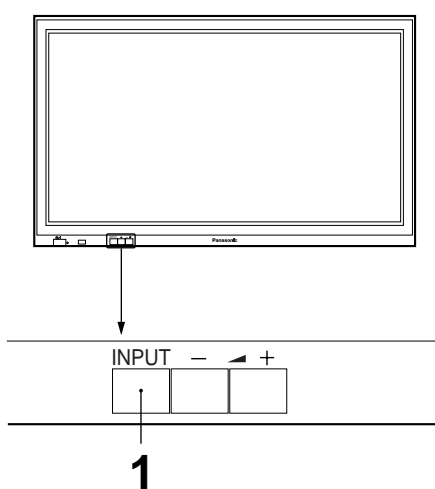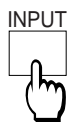
1   INPUT   Press the INPUT button to select the input
video signal to be played back from equipment
such as a VCR which has been connected to
the Wide Plasma Display.

INPUT   −   ◢ +
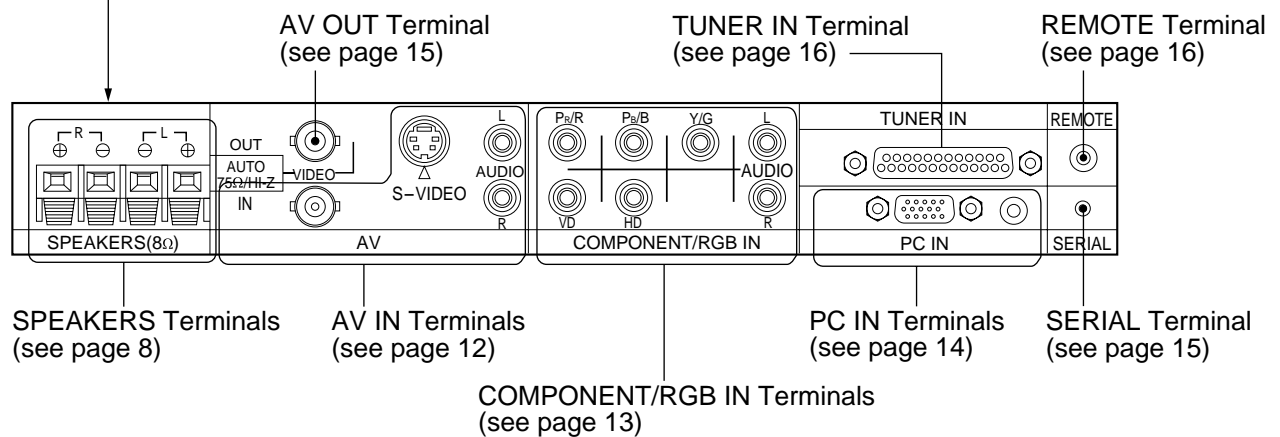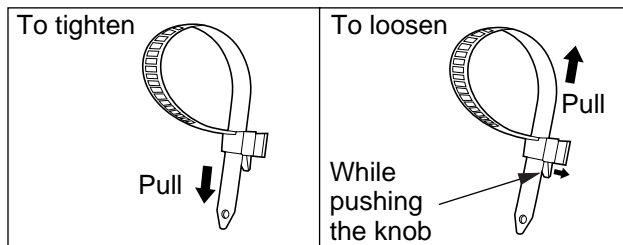
1

Basic Controls

Main Power On/Off Switch

Power Indicator

INPUT button (AV(S-Video)/Component, RGB/PC Mode Selection)
Push the "INPUT" Button to select AV(S-Video)/Component, RGB/PC input signal modes sequentially.

Volume Adjustment
Push the Volume Up "+" or Down "–" Button to increase or decrease the volume level.

Status Button
Push the "Status" Button to display the current system status.

AV
4:3 ①
②

Off timer 30 ③

① AV(S-Video)/Component, RGB/PC Mode
② Aspect Mode (See page 18)
③ Off timer
The off timer indicator is displayed only when the off timer has been set.

Off Timer Button
The Wide Plasma Display may be preset to switch to stand-by after a fixed period.
The setting changes to 30 minutes, 60 minutes, 90 minutes and 0 minutes (off timer cancelled) each time the button is pressed.

⊡30 → ⊡60 → ⊡90
⊡0

When three minutes remain, "Off timer 3" will flash.
The off timer is cancelled if the mains supply fails.

PC Mode Selection
Push the "PC" mode selection button to select the PC mode.
This button is used to switch directly to PC mode.

ASPECT-MANUAL button
(see page 18)

PICTURE MODE button
(see page 23)

MENU button

Stand-by (ON/OFF) button
The Wide Plasma Display must first be switched on at the wall outlet and at the Power Switch. (See page 9)
Push this button to turn the Wide Plasma Display ON, from STANDBY mode. Push it again to turn the Wide Plasma Display OFF, STANDBY mode.

Panasonic
PLASMA DISPLAY

INPUT button (AV(S-Video)/Component, RGB/PC Mode Selection)
Push the "INPUT" Button to select AV(S-Video)/Component, RGB/PC input signal modes sequentially.

Sound mute On/Off

Volume Adjustment
Push the Volume Up "+" or Down "–" Button to increase or decrease the sound volume level.

ASPECT-AUTO button
(see page 18)

Surround button
(see page 22)

N button
(see page 21,24,25,26)

STORE button

Cursor buttons to make selections and adjustments

PICTURE POS./SIZE button
(see page 20)

PC
MANUAL-ASPECT-AUTO
PICTURE MODE
MENU N
STR
PICTURE POS./SIZE

Connections

Cable fixing bands
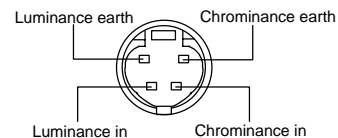Secure any excess cables with bands as required.

To tighten	To loosen
Pull	Pull While pushing the knob

AV OUT Terminal
(see page 15)

TUNER IN Terminal
(see page 16)

REMOTE Terminal
(see page 16)

R ⊕ ⊖   L ⊖ ⊕

OUT
AUTO
75Ω/HI-Z
IN

VIDEO

S-VIDEO

L
AUDIO
R

P$_R$/R   P$_B$/B   Y/G   L
AUDIO
VD   HD   R

TUNER IN

REMOTE

PC IN

SERIAL

SPEAKERS(8Ω)   AV   COMPONENT/RGB IN   PC IN   SERIAL

SPEAKERS Terminals
(see page 8)

AV IN Terminals
(see page 12)

PC IN Terminals
(see page 14)

SERIAL Terminal
(see page 15)

COMPONENT/RGB IN Terminals
(see page 13)

Connections

How to connect the AV Input Terminals

S-VIDEO Signal Connection

S-Video terminal pins layout

Luminance earth — Chrominance earth

Luminance in — Chrominance in

Video Signal Connection

Installing the ferrite sleeve

1 Pull back the tabs (in two places)

2 Open

3 Pass the cable through and close

Note:
(1) Additional equipment and cables shown are not supplied with this set.

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Connections

How to connect the COMPONENT/RGB Input Terminals

Component signals (Y, P_B, P_R) Connection

DVD Player

The Wide Plasma Display rear terminals

Audio OUT
R   L

DVD (Y,P_B,P_R) OUT
Y   P_B   P_R

Video input to Y,P_B,P_R sockets

Y,P_B,P_R

3×RCA Video cables

AUDIO

2×RCA Audio cables

Audio input to L/R sockets
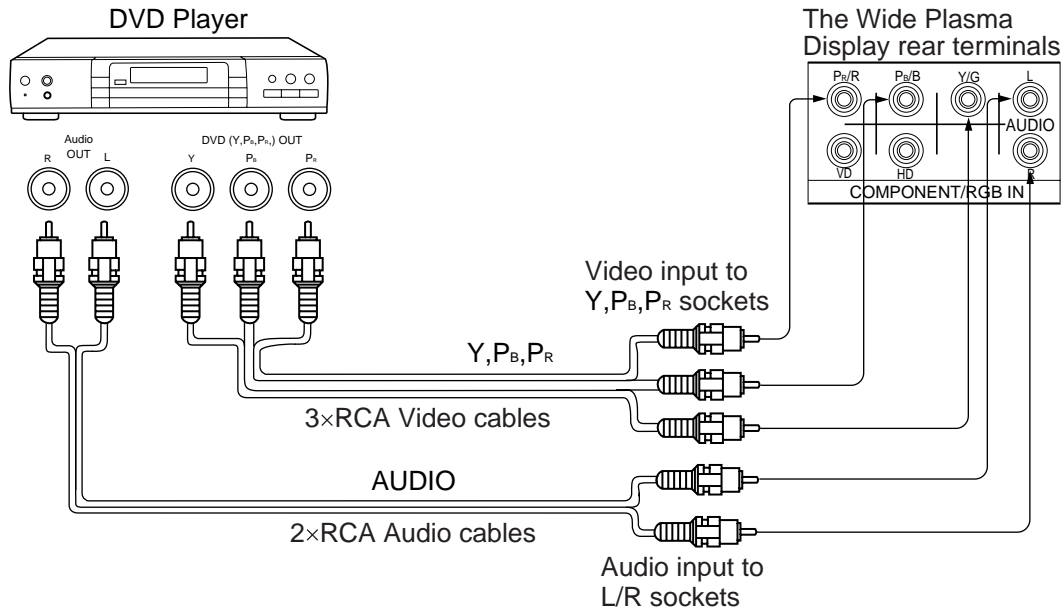
Note:
(1) Change the "COMPONENT/RGB IN" setting in the "Set up" menu to "Y/PB/PR". (Refer to page 28.)
(2) Additional equipment and cables shown are not supplied with this set.

RGB signals (R, G, B, HD, VD) Connection

Example of input signal source

HDTV-compatible VCR

or

RGB camera

RGB input to R,G,B,HD,VD sockets

G

B

R

5×RCA RGB cables

The Wide Plasma Display rear terminals

VD

HD

AUDIO

2×RCA Audio cables

Audio input to L/R sockets
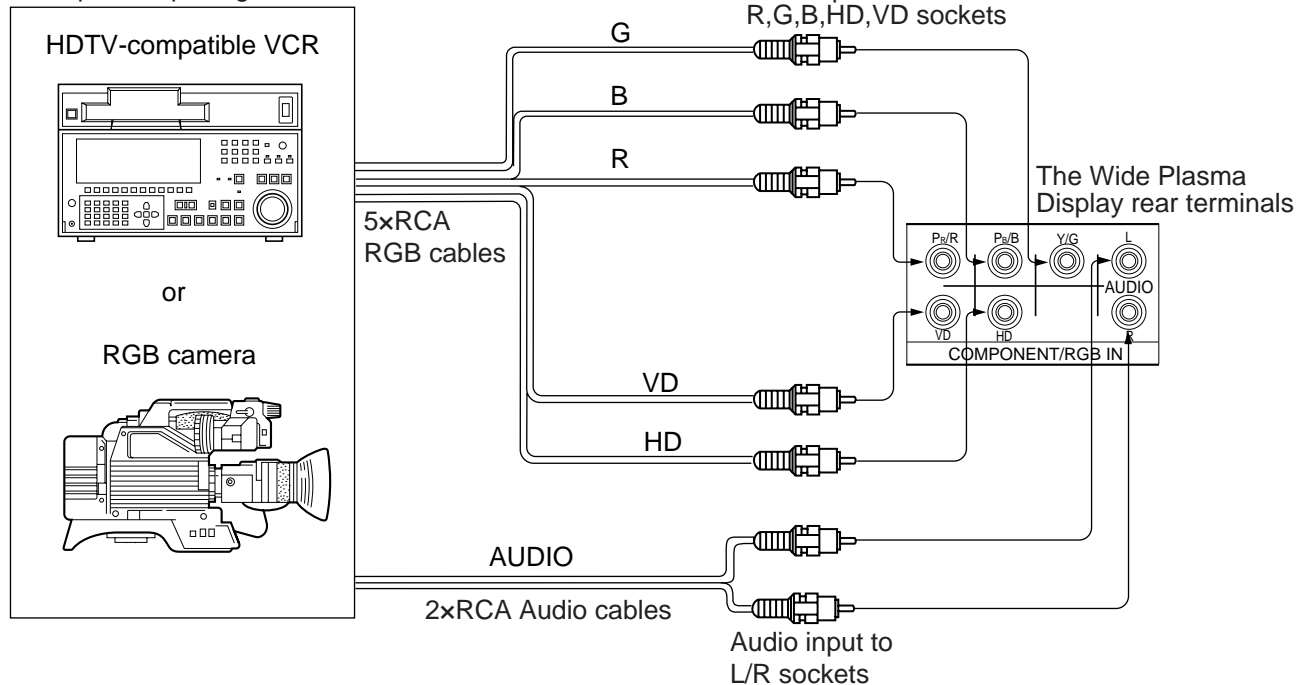
Note:
(1) Change the "COMPONENT/RGB IN" setting in the "Set up" menu to "RGB". (Refer to page 28.)
(2) Additional equipment and cables shown are not supplied with this set.

13

Connections

How to connect the PC Input Terminals

COMPUTER

The Wide Plasma Display rear terminals

Conversion adaptor (if necessary)

D-sub 15p

RGB

RGB cable

less than 20 cm

less than 20 cm

AUDIO

3mm Stereo Plug

Connect a cable which matches the audio output terminal on the computer.
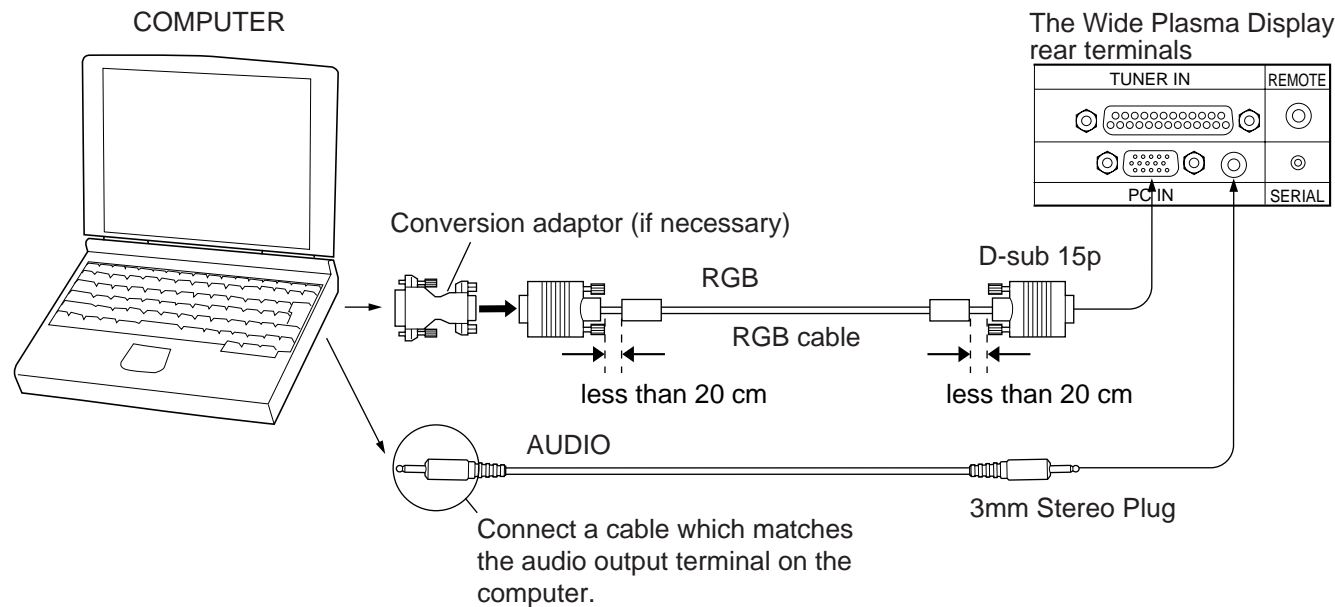
Note:
(1) Computer signals which can be input are those with a horizontal scanning frequency of 15.6 to 50 kHz and a vertical scanning frequency of 50 to 75 Hz. (However, signals cannot be displayed if they have a horizontal scanning frequency of less than 30 kHz and a vertical scanning frequency of more than 65 Hz, or a horizontal scanning frequency of more than 40 kHz and a vertical scanning frequency of less than 55 Hz.)
(2) The display resolution is a maximum 640×480 dots when the aspect mode is set to "4:3", and 852×480 dots when the aspect mode is set to "16:9". If the display resolution exceeds these maximums, it may not be possible to show fine detail with sufficient clarity.
(3) The PC input terminals are DDC1/2B-compatible. If the computer being connected is not DDC1/2B-compatible, you will need to make setting changes to the computer at the time of connection.
(4) Some PC models cannot be connected to the set.
(5) An adapter is required to use the RGB cable (D-sub 15P) to connect a PC-98 series computer (which has a D-sub 15P terminal) or a Macintosh computer to the set.
(6) There is no need to use an adapter for computers with DOS/V compatible D-sub 15P terminal.
(7) The computer shown in the illustration is for example purposes only.
(8) Additional equipment and cables shown are not supplied with this set.
(9) The picture will become dark if a PC signal with a vertical scanning frequency of over 62 Hz is input. To obtain the optimum picture quality with the Wide Plasma Display, a vertical scanning frequency of 60 Hz is recommended.
(10) Do not set the horizontal and vertical scanning frequencies for PC signals which are above or below the specified frequency range.

Signal Pin-out for D-sub 15P Connector
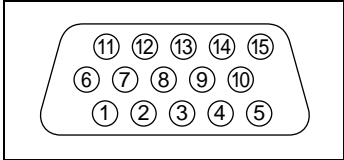
Pin Layout for PC Input Terminal

Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R	⑥	GND (Ground)	⑪	GND (Ground)
②	G	⑦	GND (Ground)	⑫	SDA
③	B	⑧	GND (Ground)	⑬	HD/SYNC
④	GND (Ground)	⑨	NC (not connected)	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	SCL

How to connect the AV Output Terminal to other equipment

The video output terminal outputs the signals which are input to the video input terminal.
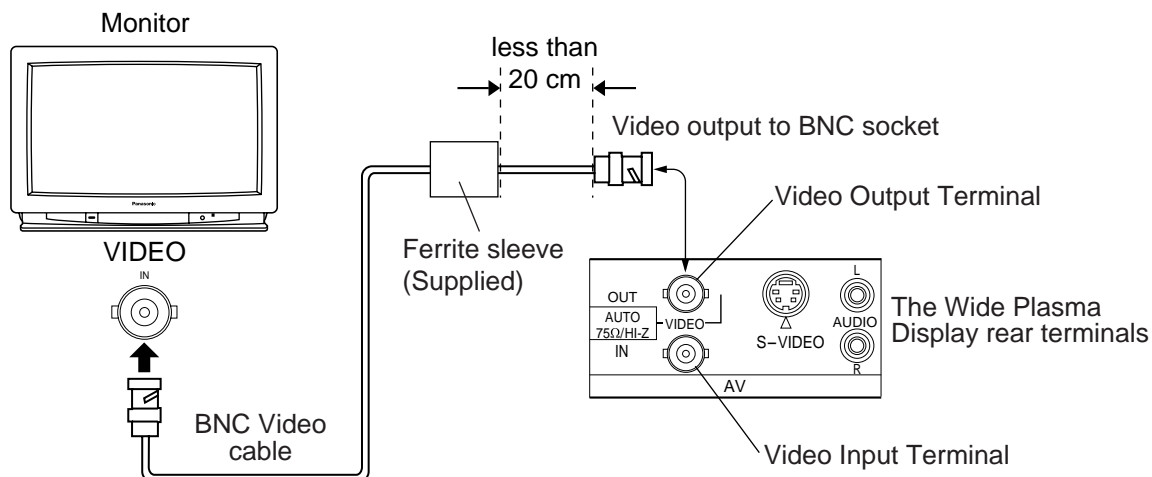
Note:
(1) The signal from the video output terminal is identical to the signal fed to the video input terminal.
(2) Additional equipment and cables shown are not supplied with this set.

How to connect the SERIAL Terminal

The SERIAL terminal is used when the Wide Plasma Display is controlled by a computer.
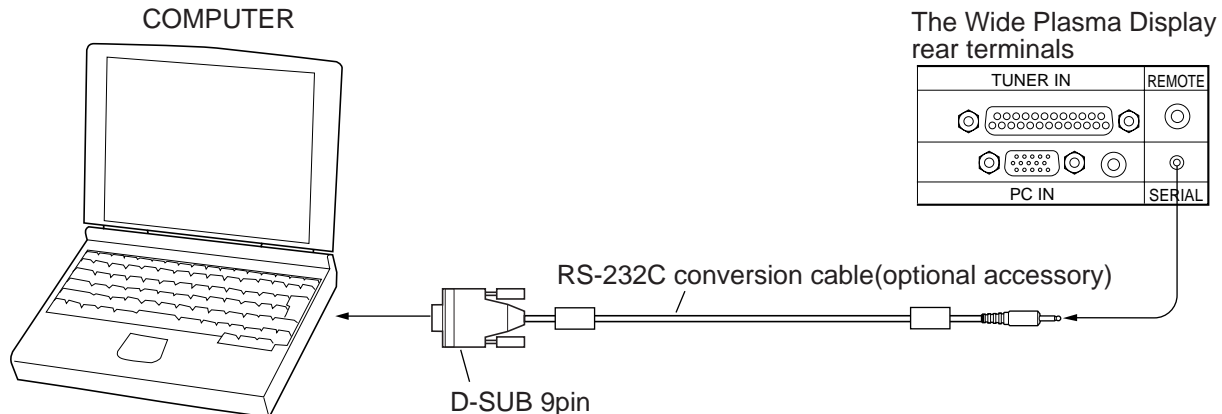
Note:
(1) Use the TY-SCP02RS1E RS-232C conversion cable (optional accessory) to connect the computer to the Wide Plasma Display.
(2) Refer to page 29 for details of the control method for the Wide Plasma Display.
(3) The computer shown is for example purposes only.
(4) Additional equipment and cables shown are not supplied with this set.

Connections

How to connect the REMOTE Terminal

The REMOTE terminal is reserved for use with future compatible components.

The Wide
Plasma Display
rear terminals

TUNER IN   REMOTE

PC IN   SERIAL
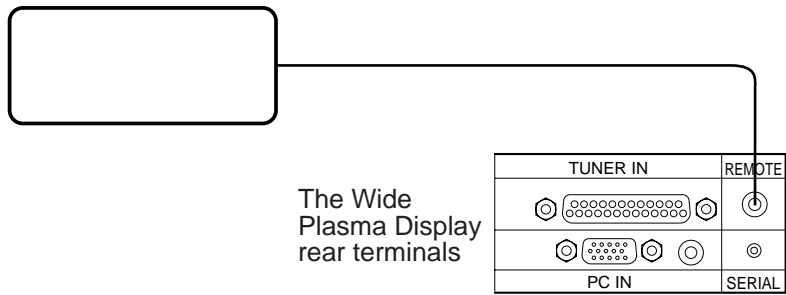
How to connect the TUNER Input Terminal
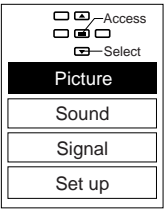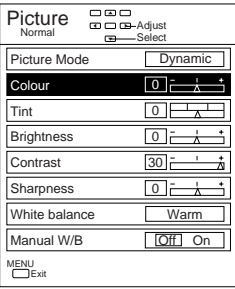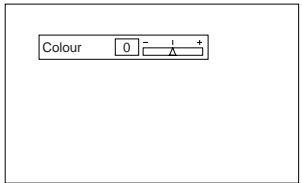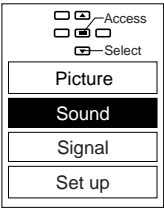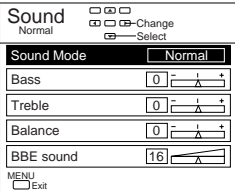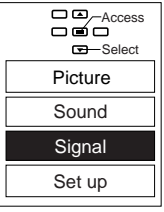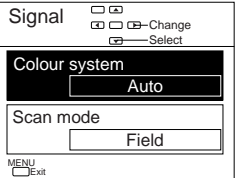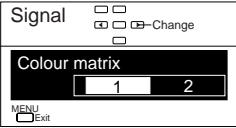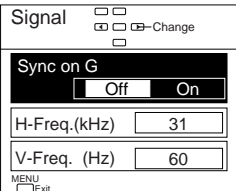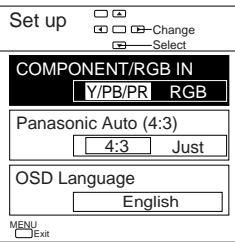
The TUNER Input terminal is reserved for use with future external compatible components.

The Wide
Plasma Display
rear terminals

TUNER IN   REMOTE

PC IN   SERIAL
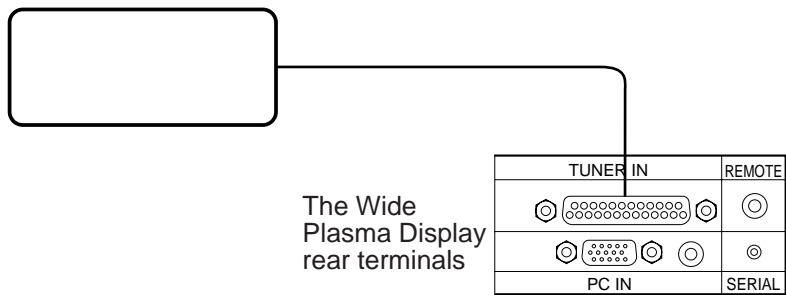
Menu Flowchart

If the MENU button is pressed, the Menu screen will be displayed.
If the MENU button is pressed once more while the menu screen is displayed, the Menu screen will be cleared.

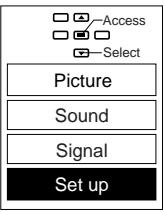| Menu	On-Screen Indication
Picture (Refer to page 24.)	**STR** → **Picture** *Normal* — Adjust / Select Picture Mode — Dynamic Colour — 0 Tint — 0 Brightness — 0 Contrast — 30 Sharpness — 0 White balance — Warm Manual W/B — Off / On MENU Exit **adjust** ◄ ► → Colour — 0
Sound (Refer to page 26.)	**STR** → **Sound** *Normal* — Change / Select Sound Mode — Normal Bass — 0 Treble — 0 Balance — 0 BBE sound — 16 MENU Exit
Signal (Refer to page 27.)	**STR** → **Signal** — Change / Select Colour system — Auto Scan mode — Field MENU Exit During AV(S-Video) mode **Signal** — Change Colour matrix — 1 / 2 MENU Exit During Component mode **Signal** — Change Sync on G — Off / On H-Freq.(kHz) — 31 V-Freq. (Hz) — 60 MENU Exit During RGB and PC modes
Set up (Refer to page 28.)	**STR** → **Set up** — Change / Select COMPONENT/RGB IN — Y/PB/PR / RGB Panasonic Auto (4:3) — 4:3 / Just OSD Language — English MENU Exit

ASPECT Controls

The Wide Plasma Display will allow you to enjoy viewing the picture at its maximum size, including wide screen "cinema format" picture.
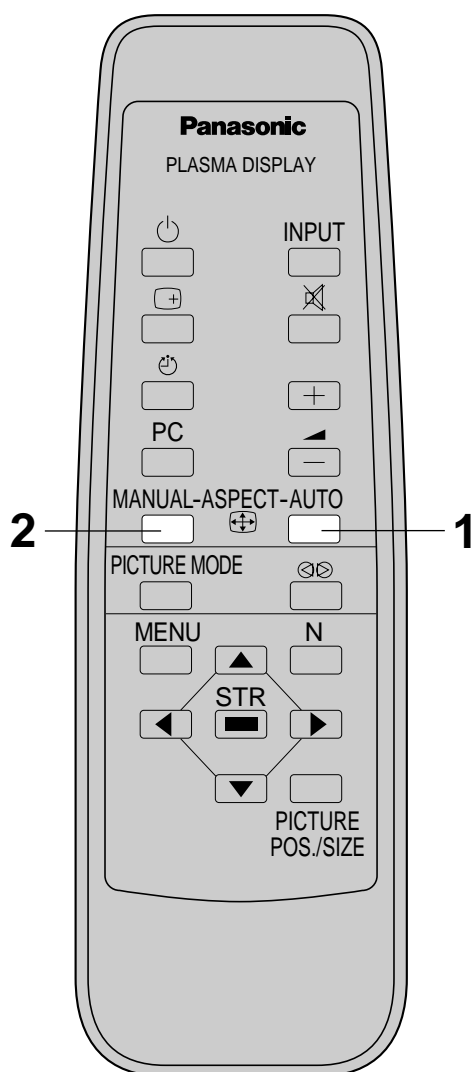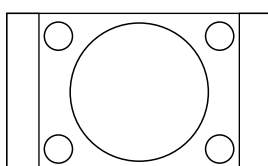
1 ASPECT-AUTO **ASPECT-AUTO Button (Panasonic Auto)**

Press the ASPECT-AUTO button to switch to Panasonic Auto mode. The display will automatically become enlarged.
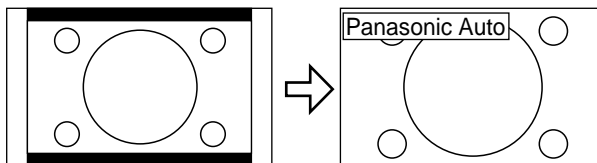

For an elongated image   Image is expanded

For a 4:3 image

Changes in accordance with the Panasonic Auto mode setting. (Refer to page 28.)
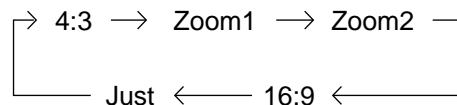
Note:

(1) If an S1 signal is detected while Panasonic Auto mode is active, the aspect mode will change to "16:9".

(2) If a 525p or 1080i signal is input during Component input signal mode and during RGB and PC input signal mode the controls will not operate.
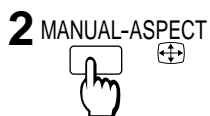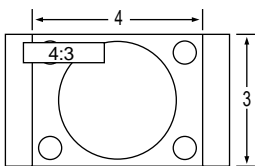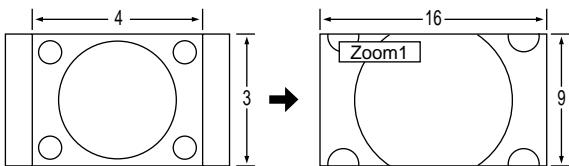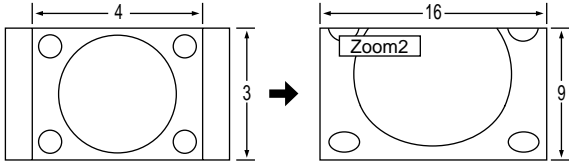
2 MANUAL-ASPECT **ASPECT-MANUAL button**
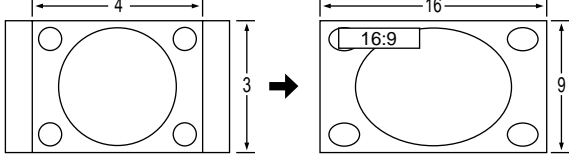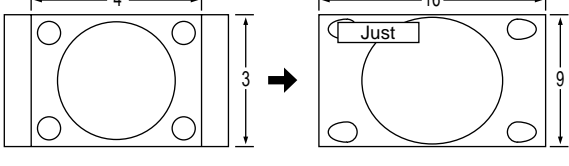
The aspect mode changes each time the ASPECT-MANUAL button is pressed.

4:3 → Zoom1 → Zoom2 → 16:9 → Just → (back to 4:3)

Note:

(1) During RGB and PC input signal mode, the mode switches between "4:3" and "16:9" only.

(2) For a 525p (480p) signal input during "Component" input signal mode, the mode switches between "Zoom1" and "16:9" only.

(3) When an S1 signal is being received during "S-Video" input signal mode, the mode is set to "16:9" mode.

(4) When a 1080i signal is being received, the mode is set to "16:9" mode, and switching is not possible.

(5) The aspect mode is memorised separately for different input signal formats (NTSC/PAL/SECAM, 525p, RGB and PC). (525p includes 525i and 625i signals.)

Panasonic
PLASMA DISPLAY

INPUT

PC

MANUAL-ASPECT-AUTO

2 — — **1**

PICTURE MODE

MENU   N

STR

PICTURE POS./SIZE

ASPECT Controls

| Mode	Picture	Explanation
4:3		4:3 will display a 4:3 picture at its standard 4:3 size and can be selected if you wish to view in this format.
Zoom1		Zoom1 mode magnifies the central section of the picture.
Zoom2		Zoom2 mode compresses the bottom section of the screen which is cut in Zoom1 mode, so that this section still remains visible.
16:9		16:9 will display the picture at its maximum size but with slight elongation.
Just		Just mode will display a 4:3 picture at maximum size but with aspect correction applied to the centre of the screen so that elongation is only apparent at the left and right edges of the screen. The size of the picture will depend on the original signal.

PICTURE POS./SIZE Controls
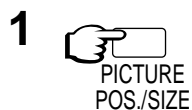
1 👉 **PICTURE POS./SIZE button**
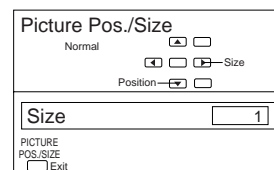PICTURE POS./SIZE

When the PICTURE POS./SIZE button is pressed, the Picture Pos./Size menu appears, and the picture size and vertical picture position can then be adjusted.
The adjustable items and adjustment ranges vary for each input signal and aspect mode.
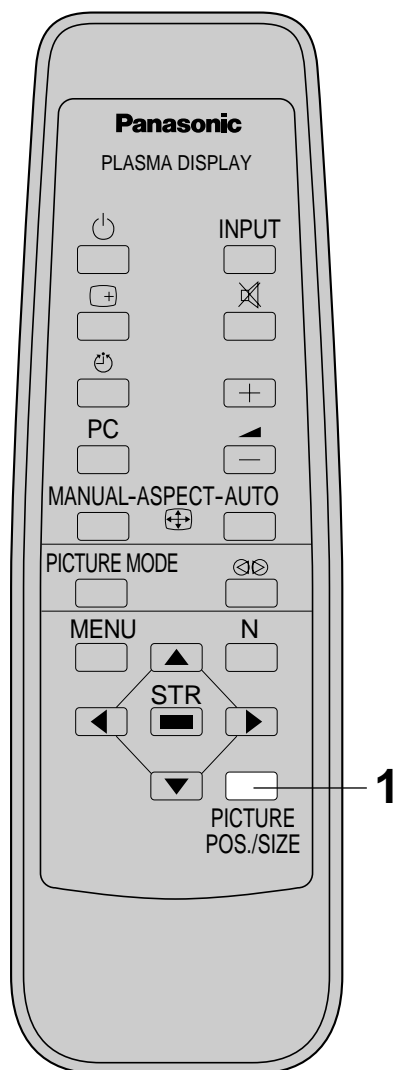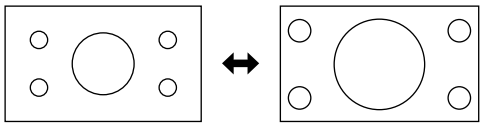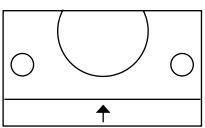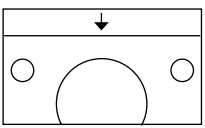
During "AV(S-Video)" and "Component" input signal modes

The Position Left "◄" and Right "►" buttons can be used to change the picture size.

◄ ►

The Position Up "▲" and Down "▼" buttons can be used to adjust the vertical picture position.

▲
▼

```
Picture Pos./Size
        Normal         ▲  ▢
                  ◄ ▢ ▢► —Size
             Position—▼ ▢
 ┌──────────────────────────┐
 │ Size                   1 │
 └──────────────────────────┘
 PICTURE
 POS./SIZE
 ▢ Exit
```

Button	Picture
Changing the size ◄ ►	Example ○ ⬭ ○ ⬭○○ ↔ ○ ⬭ ○ ⬭○
Moving the picture position (up) ▲	
Moving the picture position (down) ▼	

Note:

(1) The picture size cannot be changed in "Zoom1" mode when a 525p (480p) component signal is being input.

(2) The vertical position cannot be changed when Size 1 and Size 2 have been selected in "4:3" mode and when Size 1 has been selected in "16:9" mode. In addition, the vertical position cannot be changed when 1080i signals are being input.

(3) Adjustment details are memorised separately for different input signal formats (NTSC/PAL/SECAM, 525p (480p), 1080i, 525i and 625i).

(4) If a "Cue" or "Rew" signal from a VCR or DVD player is received, the picture position will shift up or down. This picture position movement cannot be controlled by the Picture Pos./Size function.

Panasonic

PLASMA DISPLAY

⏻　　　INPUT

🔲　　　🔇

⏾　　　＋

PC　　　◢

MANUAL–ASPECT–AUTO
⊕

PICTURE MODE　　◁▷

MENU　　　N

▲

STR
◄ ▬ ►

▼　　🔲 ——— **1**

PICTURE
POS./SIZE

PICTURE POS./SIZE Controls

During "RGB" and "PC" input signal modes

Choose the option and adjust by pushing the Position Up "▲" or Down "▼" buttons, and by setting with the Position Left "◄" or Right "►" buttons.

Picture Pos./Size

Normal — Adjust
Select

H-pos − | +
V-pos − | +
H-size − | +
V-size − | +
Clock Phase − | +

PICTURE POS./SIZE Exit
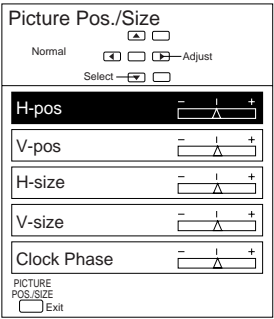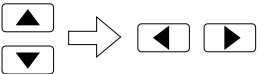
Mode	Picture	
H-pos	When the Position Left "◄" button is pressed	When the Position Right "►" button is pressed
V-pos	When the Position Left "◄" button is pressed	When the Position Right "►" button is pressed
H-size	When the Position Left "◄" button is pressed	When the Position Right "►" button is pressed
V-size	When the Position Left "◄" button is pressed	When the Position Right "►" button is pressed
Clock Phase	Flickering and distortion can be eliminated by using the Position Left "◄" or Right "►" button to carry out adjustment.	

Note:

(1) The same adjustment details are memorised in both RGB and PC input signal modes for each type of input signal (frequency).

💡 Helpful Hint (N Normalisation)

If the N button on the remote control unit is pressed when the Picture Pos./Size display is active, all adjustment values will be returned to the factory setting level.

SURROUND Controls

1

Surround Button

The benefits of surround sound are enormous. You can be completely enveloped in sound; just as if you were at a concert hall or cinema.

The surround setting switches on and off each time the SURROUND button is pressed.

On ←——→ Off
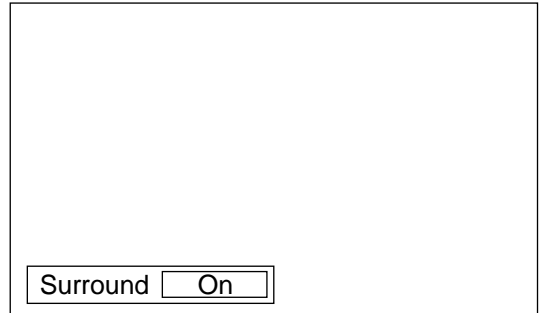
Surround ___On___

Note:

(1) The surround settings are memorised separately for each input terminal (AV, COMPONENT/RGB and PC).

Panasonic

PLASMA DISPLAY

INPUT

PC

MANUAL-ASPECT-AUTO

PICTURE MODE

1

MENU   N

STR
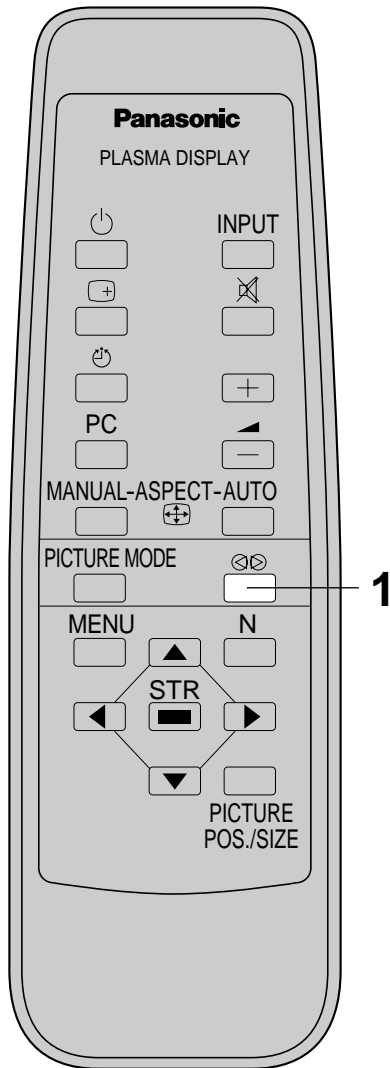
PICTURE
POS./SIZE

PICTURE MODE Controls
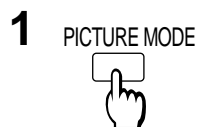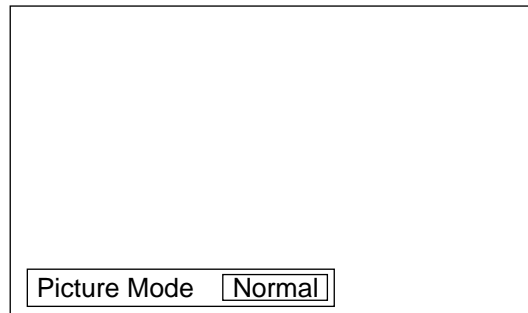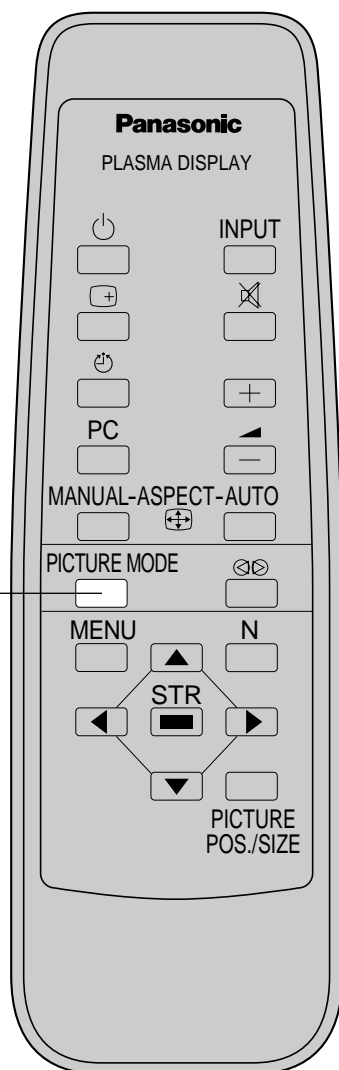
1 PICTURE MODE **PICTURE MODE Button**
Operation switches between "Normal" and "Dynamic" each time the PICTURE MODE button is pressed.

Normal ⟷ **Dynamic**

Picture Mode   Normal

Normal	For viewing in normal (evening lighting) environments. This menu selects normal levels of Brightness and Contrast.
Dynamic	For viewing in brighter environments. This menu selects a higher than normal levels of Brightness and Contrast.

Note:

(1) If you would like to change the picture and colour of the selected Picture Mode to something else, adjust using the "Picture" menu command in the Menu. (Refer to page 24.)

(2) The setting details are memorised separately for five types of input signal format (NTSC, PAL, SECAM, 1080i and RGB/PC). (NTSC includes 525i and 525p (480p) signals, and PAL includes 625i signals.)

Panasonic

PLASMA DISPLAY

INPUT

PC

MANUAL-ASPECT-AUTO

PICTURE MODE

MENU   N

STR

PICTURE POS./SIZE

1

Picture Menu

1. Push the "Menu" Button.

2. Select the "Picture" Menu by pushing the Position Up "▲" or Down "▼" Button and Access the "Picture" Menu by pushing the "STR" Button.

3. Select the required function by pushing the Position Up "▲" or Down "▼" buttons, and access and alter the setting by pushing the Position Left "◄" or Right "►" buttons.

MENU

▲
▼ ⟹ STR ⬛

▲
▼ ⟹ ◄ ►

1,2
```
☐☐ ☑ —Access
☐☐☐
☑—Select
```
| Picture |
| Sound |
| Signal |
| Set up |

3
Picture ☐☐☐ —Adjust
Normal   ☐☐☐—Select

Picture Mode	Dynamic
Colour	0
Tint	0
Brightness	0
Contrast	30
Sharpness	0
White balance	Warm
Manual W/B	Off On

MENU
☐ Exit

Note:

(1) You can change the level of each Function (Picture Mode, Colour, Tint, Brightness, Contrast, Sharpness, White balance) for each picture Menu.

(2) The setting details for normal and dynamic respectively are memorised separately for five types of input signal format (NTSC, PAL, SECAM, 1080i and RGB/PC). (NTSC includes 525i and 525p (480p) signals, and PAL includes 625i signals.)

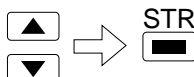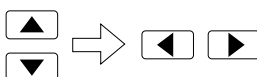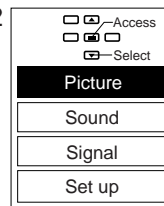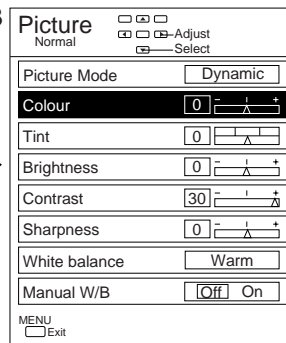| Picture Mode	Function
Normal	For viewing in normal (evening lighting) environments. This menu selects the normal levels of Brightness and Contrast.
Dynamic	For viewing in brighter environments. This menu selects a higher than normal levels of Brightness and Contrast.

Note:

(1) The "Tint" setting can be adjusted for NTSC signal only.

(2) "Colour", "Tint" and "Sharpness" settings cannot be adjusted during "RGB" and "PC" input signal modes.

(3) If the "Manual W/B" setting is changed to ON and the Position Down "▼" button is pressed, the "Manual W/B" menu will be displayed. (Refer to page 25.)

(4) The adjustment range values should be used as an adjustment reference.

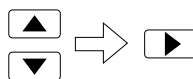| Item	Effect	Adjustment range
Picture Mode	◄ ►	Normal / Dynamic
Colour	◄ ► Less More	-30 ⎯⎯ 30
Tint (NTSC only)	◄ ► Reddish Greenish	-30 ⎯⎯ 30
Brightness	◄ ► Darker Brighter	-15 ⎯⎯ 15
Contrast	◄ ► Less More	-30 ⎯⎯ 30
Sharpness	◄ ► Less More	-15 ⎯⎯ 15
White balance	◄ ►	Warm / Normal / Cool
Manual W/B	◄ ►	Off / On

💡 Helpful Hint (N Normalisation)

If the N button on the remote control unit is pressed when the "Picture" menu is displayed, all adjustment values will be returned to the factory setting level of each picture mode.

Picture Menu

1. Use the Position Up "▲" or Down "▼" buttons to select the "Manual W/B" menu from the "Picture" menu, and then use the Position Right "►" button to select "On".
2. Press the Position Down "▼" button. (The "Manual W/B" menu screen will then be displayed.)
3. Select the required function by pushing the Position Up "▲" or Down "▼"buttons, and access and alter the setting by pushing the Position Left "◄" or Right "►" buttons.
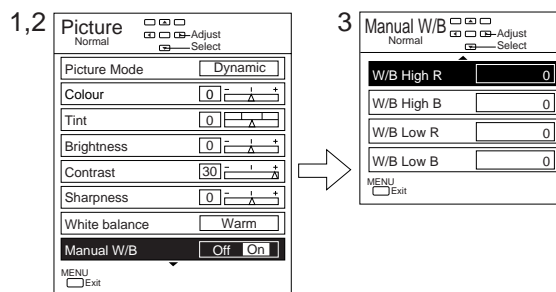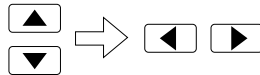
Item	Effect	Adjustment range	Details
W/B High R	◄ Less ► More	-30 – 30	Adjusts the white balance for light red areas.
W/B High B	◄ Less ► More	-30 – 30	Adjusts the white balance for light blue areas.
W/B Low R	◄ Less ► More	-30 – 30	Adjusts the white balance for dark red areas.
W/B Low B	◄ Less ► More	-30 – 30	Adjusts the white balance for dark blue areas.

Note:

(1) Use the table below as a reference when making "W/B" adjustments.

Item	Adjustment value for cold white balance	Adjustment value for warm white balance
W/B High R	-5	10
W/B High B	10	-5
W/B Low R	0	0
W/B Low B	0	0

(2) The adjusted values are memorised separately for each Picture Mode (Normal/Dynamic).
(3) The adjustment range values should be used as an adjustment reference.
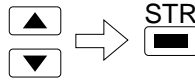
☀ Helpful Hint (N Normalisation)

If the N button on the remote control unit is pressed when the "Manual W/B" menu is displayed, all adjustment values will be returned to the factory setting level.
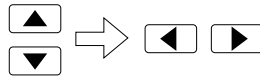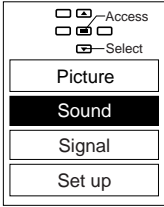
25

Sound Menu

1. Push the "Menu" Button.

2. Select the "Sound" Menu by pushing the Position Up "▲" or Down "▼" Button and Access the "Sound" Menu by pushing the "STR" Button.
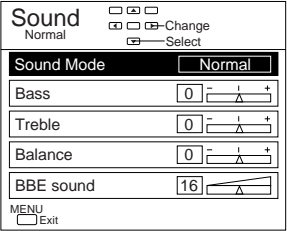
3. Select the required function by pushing the Position Up "▲" or Down "▼"buttons, and access and alter the setting by pushing the Position Left "◄"or Right"►" buttons.

MENU

▲ ▼ ⟹ STR

▲ ▼ ⟹ ◄ ►

1,2
□□ ⬚—Access
□ ⬚□
⬚—Select

| Picture |
| Sound |
| Signal |
| Set up |

3
Sound □□ □
Normal ⬚ □ ⬚—Change
⬚——Select

Sound Mode	Normal
Bass	0
Treble	0
Balance	0
BBE sound	16

MENU
□Exit

Note:

(1) You can change the level of each Function (Bass, Treble, Balance, BBE sound) for each Sound Menu.
(2) The same adjustment details are memorised for all input terminals (AV(S-Video), COMPONENT/RGB and PC).

Sound Mode	Function
Normal	Same sound as the input signal
Music	Bass and Treble is set to optimum level for music.
Speech	Bass and Treble is set to optimum level for speech.

Note:

(1) "BBE sound" adjusts the clarity of the sound. An adjustment value of "0" is for normal sound.
(2) Adjustment values other than the "Balance" value are memorised separately for each Sound Mode (Normal/Music/Speech).
(3) The adjustment range values should be used as an adjustment reference.

| Item	Effect	Adjustment range
Bass	◄ ► Less More	-15 ⸺ 15
Treble	◄ ► Less More	-15 ⸺ 15
Balance	◄ ► Left SP. Right SP.	-30 ⸺ 30
BBE sound	◄ ► Less More	0 ⸺ 30

☀ Helpful Hint (N Normalisation)

If the N button on the remote control unit is pressed when the "Sound" menu is displayed, all adjustment values will be returned to the factory setting level of each sound mode.
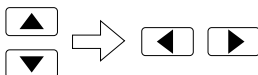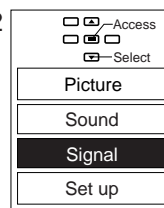
Signal Menu

1. Push the "Menu" Button.

2. Select the "Signal" Menu by pushing the Position Up "▲"or Down "▼" Button and Access the "Signal" Menu by pushing the "STR" Button.
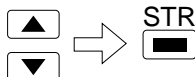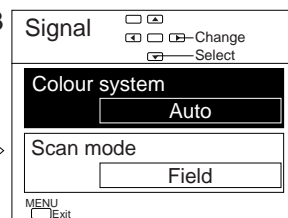
3. Select the required mode by pushing the Position Up "▲" or Down "▼" buttons, and set the appropriate function by the Position Left "◄" or Right "►" buttons.

MENU

▲
▼

STR

▲
▼

◄ ►

1,2

☐☐☐ —Access
☐☐☐
☐——Select

| Picture |
| Sound |
| Signal |
| Set up |

3 Signal
☐☐
☐☐ ☐—Change
☐——Select

Colour system
Auto

Scan mode
Field

MENU
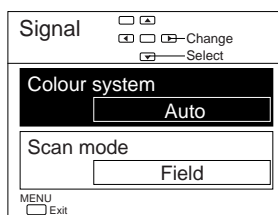☐Exit

During "AV(S-Video)" input signal mode

Note:

(1) The "Signal" screen changes depending on the input signal mode (AV(S-Video), Component, RGB or PC).


During "AV(S-Video)" input signal mode

Select the mode ▲ ▼

Select the function ◄ ►

Signal
☐☐
☐☐ ☐—Change
☐——Select

Colour system
Auto

Scan mode
Field

MENU
☐Exit

Mode	Function
Colour system	Set the colour system to match the input signal. If set to "Auto", the colour system is determined automatically. →Auto ←→NTSC← →SECAM←→PAL← **Note:** (1) The display colour for the input signal mode ("AV") changes according to the colour system setting. Auto - Green NTSC - Magenta PAL - Yellow SECAM - Cyan (2) PAL-60 signal is displayed only "Auto" mode. AV
Scan mode	→Field← →Frame← If watching a normal image, select the "Field". If the recording mode used for a device such as a digital video camera is "Frame", select the "Frame" to obtain a higher-quality playback image.

During "Component" input signal mode

Select ◄ ►

Signal
☐☐
☐☐ ☐—Change
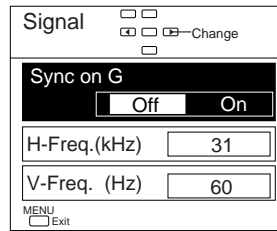☐

Colour matrix
1   2
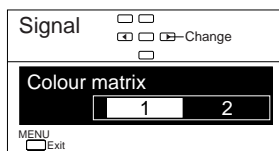
MENU
☐Exit

Mode	Function
Colour matrix	If the output signals from the source connected to the COMPONENT/RGB input terminals are in 525p (480p) format, the colours in the images from this source will be set to their natural colours.

Signal Menu

During "RGB" and "PC" input signal modes

Select   ◀ ▶

```
Signal          □□
           □ □ □ ▶—Change
                □

 Sync on G
           Off        On

 H-Freq.(kHz)        31

 V-Freq. (Hz)        60

 MENU
 □ Exit
```

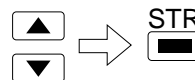| Mode	Function
Sync on G	Set to "On" when the input signals from the sources connected to the COMPONENT/RGB (R, G, B, HD and VD) input terminals and the PC input terminal are "Sync on G" signals.
H-Freq.(kHz)	Shows the horizontal scanning frequency for the video signals which are currently being displayed (display only).
V-Freq.(Hz)	Shows the vertical scanning frequency for the video signals which are currently being displayed (display only).

Note:

 (1) The "Sync on G" setting is applied to both the COMPONENT/RGB and PC input terminals.
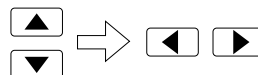
Set up Menu

1. Push the "Menu" Button.

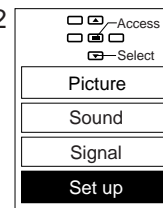2. Select the "Set up" Menu by pushing the Position Up "▲" or Down "▼" Button and Access the "Set up" Menu by pushing the "STR" Button.
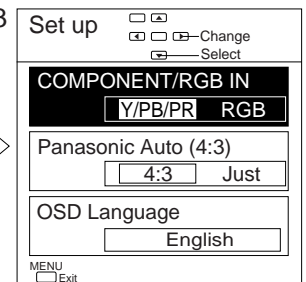
3. Select the required mode by pushing the Position Up "▲" or Down "▼" buttons, and set appropriate function by pushing the Position Left "◀" or Right "▶" buttons.
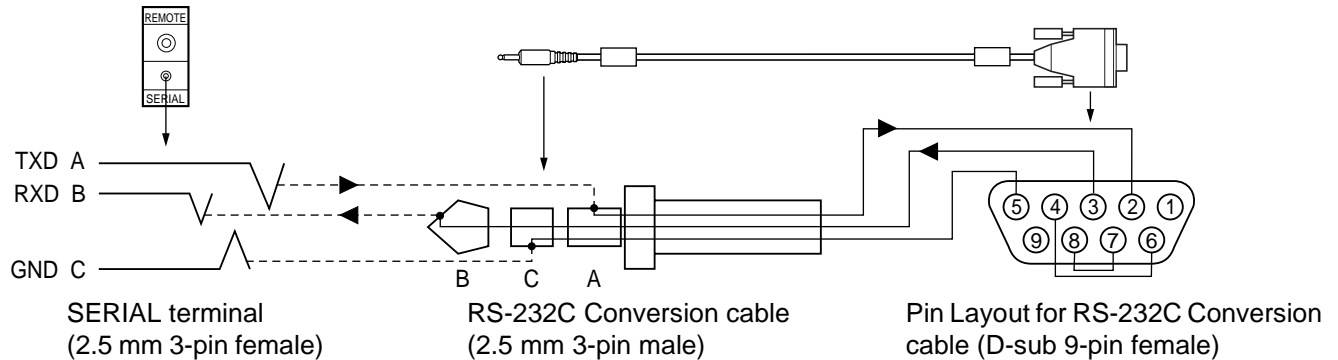
```
MENU
□

▲          STR
▼          ■

▲
▼    ◀ ▶
```

```
1,2  □ □—Access
     □ □ □
        ▣—Select
   Picture
   Sound
   Signal
   Set up
```

```
3  Set up       □ □
          □ □ □ ▶—Change
                ▶——Select
   COMPONENT/RGB IN
         Y/PB/PR   RGB
   Panasonic Auto (4:3)
             4:3    Just
   OSD Language
             English
   MENU
   □ Exit
```

Mode	Function
COMPONENT/ RGB IN	Select to match the signals from the source connected to the COMPONENT/RGB input terminals. Y, P_B, P_R signals ⇨ "Y/PB/PR" R, G, B, HD, VD signals ⇨ "RGB"
Panasonic Auto (4:3)	Set to "4:3" if using the ASPECT-AUTO button function to view 4:3 images in an unchanged format. If you would like to view 4:3 images in "Just" format, set to "Just".
OSD Language	Select the on-screen display language (English/Deutsch/Français/Italiano/Español).

SERIAL terminal

The SERIAL terminal conforms to the RS-232C interface specification, so that the Wide Plasma Display can be controlled by a computer which is connected to this terminal.
You can control the Wide Plasma Display with a computer by using the TY-SCP02RS1E (optional accessory).
The computer will require software which allows the sending and receiving of control data which satisfies the conditions given below. Use a computer application such as a programming language to create the software. Refer to the documentation for the computer application for details.
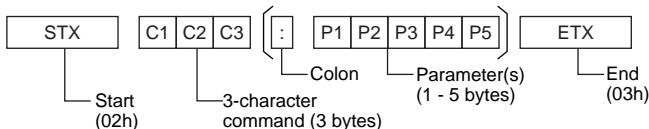
Pin layout and signal names

| SERIAL terminal (2.5 mm 3-pin female) | RS-232C Conversion cable (2.5 mm 3-pin male) | Pin Layout for RS-232C Conversion cable (D-sub 9-pin female) |

Communication parameters

Signal level	RS-232C compliant
Synchronisation method	Asynchronous
Baud rate	9600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

The Wide Plasma Display (SERIAL terminal)		RS-232C Conversion cable		Computer
Details	2.5mm dia. 3-pin female	2.5mm dia. 3-pin male	D-sub 9-pin female	Details
TXD	A	A	②	RXD
RXD	B	B	③	TXD
GND	C	C	⑤	GND
		Shorted ⌐↳	④ ⑥	
		Shorted ⌐↳	⑦ ⑧	
		NC	① • ⑨	

Basic format for control data

The transmission of control data from the computer starts with an STX signal, followed by the command, the parameters, and lastly an ETX signal in that order. If there are no parameters, then the parameter signal does not need to be sent.

| STX | C1 C2 C3 | : | P1 P2 P3 P4 P5 | ETX |

- Start (02h)
- 3-character command (3 bytes)
- Colon
- Parameter(s) (1 - 5 bytes)
- End (03h)

Note:

(1) If multiple commands are transmitted, be sure to wait for the response for the first command to come from this unit before sending the next command.

(2) If an incorrect command is sent by mistake, this unit will send an "ER401" command back to the computer.

Command
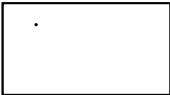
Command	Parameter	Control details
PON	None	Power ON
POF	None	Power OFF
AUU	None	Volume increase
AUD	None	Volume decrease
AMT	None	Mute (toggle)
IIS	None	Input select (toggle)
	VID	AV Mode
	YP1	Component/RGB mode (processed as a Y/P$_B$/P$_R$ or RGB signal as set by this unit)
	RG1	PC mode
DAM	None	Screen mode select (toggle)
	NORM	4:3
	ZOOM	Zoom1
	FULL	16:9
	JUST	Just
	SELF	Panasonic Auto

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Troubleshooting

Before you call for service, determine the symptoms and make a few simple checks as shown below.

Symptoms		Checks
Picture	**Sound**	**Checks**
Interference	Noisy Sound	Electrical Appliances Cars/Motorcycles Fluorescent light
Normal Picture	No Sound	Volume (Check whether the mute function has been activated on the Remote Control.)
No Picture	No Sound	Not plugged into AC outlet Not switched on Contrast and Brightness/Volume setting (Check by pushing the Power Switch or Stand-by Button on the Remote Control.)
No Picture	Normal Sound	If a signal with a non-applicable colour system, format or frequency is input, only the input terminal indication is displayed.
No Colour	Normal Sound	Colour controls set at minimum level. Colour System (Refer to page 27)
Image too bright	Normal Sound	A video signal has been connected to the AV output terminal by mistake. The input becomes high impedance, and the image becomes too bright. Connect video signals to the video input terminal.

Plasma Display panel

Symptoms	Checks
Some parts of the screen do not light up	The plasma display panel is manufactured using an extremely high level of precision technology, however sometimes some parts of the screen may have missing picture elements or have luminous spots. This is not a sign of a malfunction.
Afterimages appear	If still video images or computer images are displayed for long periods of time, an afterimage may appear. In such cases, display an image which has some degree of movement in it to reduce the afterimage effect.

Specifications

Power Source

220 – 240 V AC, 50/60 Hz

Power Consumption

Normal use: 380 W
Stand-by condition: 4 W
Power off condition: 0.7 W

Plasma Display panel

Drive method AC type
42-inch, 16:9 aspect ratio

Screen size

920 mm (W) $\times$ 518 mm (H) $\times$ 1056 mm (diagonal)
No. of pixels
408,960 (852 (W) $\times$ 480 (H)) [2,556 $\times$ 480 dots]

Operating conditions

Temperature: $0°– 40°$C
Humidity: 20% – 80%

Applicable signals

Colour System: NTSC, PAL, PAL-60, SECAM (Modified NTSC signals cannot be displayed.)
Scanning format: 525i, 525p, 625i, 625p, 1080i
PC signals: VGA, S-VGA (compressed), Horizontal scanning frequency 15.6 - 50 kHz

Connection terminals

AV	VIDEO IN (BNC)	1.0 Vp-p (75 Ω)
		(with 75 Ω or high-impedance auto select)
	S-VIDEO IN	Y: 1 Vp-p (75 Ω),C: 0.286 Vp-p (75 Ω)
	(Mini DIN 4-pin)	
	AUDIO IN L-R	0.5 Vrms
	(RCA pin jack $\times$ 2)	
	VIDEO OUT (BNC)	1.0 Vp-p (75 Ω) (bridge output)
COMPONENT/RGB	Y/G	1.0 Vp-p (including synchronisation)
	P$_B$/B	$\pm$ 0.35 Vp-p
	P$_R$/R	$\pm$ 0.35 Vp-p
	HD	$\pm$ 1.0 – 5.0 Vp-p
	VD	$\pm$ 1.0 – 5.0 Vp-p
	AUDIO IN L-R	0.5 Vrms
	(RCA pin jack $\times$ 2)	
PC	VIDEO (High-density D-sub 15-pin)	
	AUDIO	0.5 Vrms (3 mm mini jack)
SPEAKERS (8 Ω)	For TY-SP42PD1E only.	
SERIAL	External control terminal	
TUNER		
REMOTE		

Specifications

## Accessories Supplied

Remote control Transmitter	TNQE178	Cleaning Cloth	TPEX006
Battery (2 × R6 (UM3) Size)		Ferrite sleeve	TSK1027
RCA-BNC adaptor plug	TJS1A4270	Guarantee Card	

Optional Accessories

Pedestal	TY-ST42PT1E	Wall-hanging bracket (angled)	TY-WK42PR1E
Wall stand	TY-ST42PW1E	Ceiling unit	TY-CE42PS1E
Mobile stand	TY-ST42PF1E	RS-232C Conversion cable	TY-SCP02RS1E
Wall-hanging bracket (vertical)	TY-WK42PV1E		

Dimensions (W × D × H)

1030mm × 633.5mm × 89mm

1030mm
89mm
633.5mm
1193mm
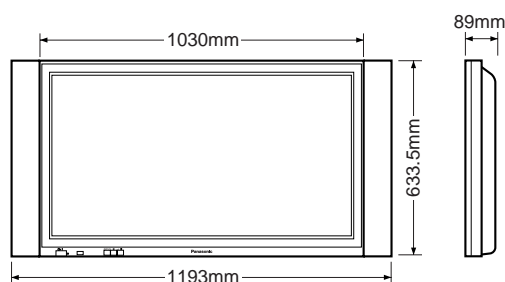
Weight (Mass)

33.0kg net (main unit only)
36.4kg (with speakers)

Note:
Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.

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Customer's Record

The model number and serial number of this product can be found on its rear cover. You should note
this serial number in the space provided below and retain this book plus your purchase receipt as a
permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty
Service purposes.

Model Number   TC-42PD1FA   Serial Number